

Customer No. 24498
Serial No. 10/030,766

Atty. Docket No. RCA89520

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellants: CHEAH, Sin Hul, et al.

Ser. No.: 10/030,766

Filed: October 22, 2001

For: MULTI-FORMAT PERSONAL DIGITAL AUDIO PLAYER

Examiner: SELLERS, Daniel R.

Art Unit: 2614

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APR 27 2009

APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

In response to the final Office Action dated October 31, 2008 and the Advisory Action dated January 16, 2009, and further to the Notice of Appeal filed on February 27, 2009, Appellants hereby submit an Appeal Brief in accordance with 37 C.F.R. §41.37 for the above-referenced application.

CERTIFICATE OF TRANSMISSION (19 pages)

I hereby certify that this amendment is being faxed to Mail Stop Appeal Brief, Commissioner for Patents, Alexandria, Virginia 22313-1450, facsimile no. 571-273-8300 on:

Date

April 27, 2009

Kathleen Lyles

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I. Real Party in Interest

The real party in interest is Thomson Licensing LLC.

II. Related Appeals and Interferences

There are no prior or pending appeals, interferences, or judicial proceedings known to appellant, the appellant's legal representative, or assignee which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. Status of Claims

Claims 1-7 and 9-10 are pending in this application, and are rejected. Claim 8 is cancelled. The rejection of claims 1-7 and 9-10 is being appealed.

IV. Status of Amendments

No amendment subsequent to the final rejection of October 31, 2008 has been filed.

V. Summary of Claimed Subject Matter

Independent claim 1 defines a method for playing back an audio data file in a handheld audio playback device wherein the audio data file is encoded in accordance with a selected one of a plurality of encoding formats (page 3, lines 13-15). The method comprises the steps of: identifying a selected audio data file in response to a user input (page 3, lines 16-17); identifying a decoder file associated with the selected audio data file (page 3, line 17), the decoder file comprising a decoding program to control a decoding function of a digital signal processor (page 5, lines 2-3); transferring the selected audio data file and the associated decoder file to the digital signal processor (page 3, lines 18-19), wherein the selected audio data file and the associated decoder file are both stored in a single removable data storage device coupled to the handheld audio playback device (page 5, lines 16-18); using a security code associated with the handheld audio playback device to generate a decryption program (page 7, lines 24-25); decrypting the associated decoder file using the decryption program (page 8, lines 14-15); decrypting the selected audio data file using the decryption program

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(page 8, lines 18-19); decoding the decrypted audio data file in accordance with the decrypted decoder file in the digital signal processor (page 8, lines 28-30); and providing the decoded audio data file to an output device (page 8, lines 30-31).

Independent claim 4 defines a handheld audio playback apparatus (element 10 of FIG. 1) for playing back an audio data file encoded in accordance with a selected one of a plurality of encoding formats (page 3, lines 3-4 and 13-15). The apparatus comprises: user input means (element 28 of FIG. 1) for receiving user commands (page 3, line 4); data input means (element 33 of FIG. 1) for receiving digital data (page 3, lines 4-5); a digital signal processor (element 12 of FIG. 1; page 3, line 6); a micro-controller (element 22 of FIG. 1), coupled to the user input means, the data input means, and the digital signal processor, for identifying a user selected audio data file and a decoder file associated with the user selected audio data file (page 3, lines 6-9), the decoder file comprising a decoding program for controlling a decoding function of the digital signal processor (page 5, lines 2-3), the micro-controller transferring the user selected audio data file and the associated decoder file from a single user removable data storage device to the digital signal processor in response to a user selection (page 3, lines 9-11), the micro-controller further transferring a security code associated with the handheld audio playback apparatus to the digital signal processor (page 7, lines 22-24), and wherein the digital signal processor uses the security code to generate a decryption program (page 7, lines 24-25), decrypts the associated decoder file using the decryption program (page 8, lines 14-15), decrypts the user selected audio data file using the decryption program (page 8, lines 18-19), and decodes the decrypted audio data file in accordance with the decrypted associated decoder file (page 8, lines 28-30).

Independent claim 6 defines a handheld audio playback system (element 10 of FIG. 1; page 3, lines 3-4), comprising: user input means (element 28 of FIG. 1) for receiving user commands (page 3, line 4); data input means (element 33 of FIG. 1) for receiving digital data (page 3, lines 4-5); a removable data storage device (element 32 of FIG. 1) coupled to the data input means (page 5, lines 18-21); a digital signal processor (element 12 of FIG. 1; page 3, line 6); and a micro-controller (element 22 of FIG. 1), coupled to the user input means, the data input means, and the digital signal

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processor, for identifying a selected audio data file and an associated decoder file stored on the removable data storage device in response to a user input (page 3, lines 6-9), the micro-controller transferring the selected audio data file and the associated decoder file to the digital signal processor (page 3, lines 9-11), the micro-controller further transferring a security code associated with the handheld audio playback system to the digital signal processor (page 7, lines 22-24), wherein the digital signal processor uses the security code to generate a decryption program (page 7, lines 24-25), decrypts the associated decoder file using the decryption program (page 8, lines 14-15), decrypts the selected audio data file using the decryption program (page 8, lines 18-19), and decodes the decrypted audio data file in accordance with the decrypted associated decoder file (page 8, lines 28-30).

Independent claim 10 defines a method for playing back an audio data file in a handheld audio playback device wherein the audio data file is encoded in accordance with a selected one of a plurality of encoding formats (page 3, lines 13-15). The method comprises the steps of: identifying a selected audio data file in response to a user input (page 3, lines 16-17); identifying a decoder file associated with the selected audio data file (page 3, line 17), the decoder file comprising a decoding program to control a decoding function of a digital signal processor (page 5, lines 2-3); transferring the selected audio data file and the associated decoder file to the digital signal processor (page 3, lines 18-19), wherein the selected audio data file and the associated decoder file are both stored in a single removable data storage device coupled to the handheld audio playback device (page 5, lines 16-18); using a security code associated with the handheld audio playback device to generate a decryption program (page 7, lines 24-25); decrypting the associated decoder file using the decryption program (page 8, lines 14-15); decrypting the selected audio data file using the decryption program (page 8, lines 18-19); decoding the decrypted audio data file in accordance with the decrypted decoder file in the digital signal processor (page 8, lines 28-30); and providing the decoded audio data file to an output device (page 8, lines 30-31).

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VI. Grounds of Rejection to be Reviewed on Appeal

The following grounds of rejection are presented for review in this appeal:

A. The rejection of claims 1-7 and 9-10 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement;

B. The rejection of claims 1-7 and 9-10 under 35 U.S.C. §112, second paragraph, as being indefinite; and

C. The rejection of claims 1-7 and 9-10 under 35 U.S.C. §103(a) based on U.S. Patent No. 6,425,018 issued to Kaganas et al. (hereinafter, "Kaganas") in view of U.S. Patent No. 7,324,974 issued to Cho et al. (hereinafter, "Cho"), and further in view of U.S. Patent No. 6,173,057 issued to Truong et al. (hereinafter, "Truong").

VII. Argument

A. Patentability of Claims 1-7 and 9-10 under 35 U.S.C. §112, First Paragraph

Appellants submit that for at least the reasons discussed below, the subject claims satisfy the requirements under 35 U.S.C. §112, first paragraph.

On pages 2-3 of the final Office Action dated October 31, 2008, the Examiner alleges that the step of "using a security code associated with the handheld audio playback device to generate a decryption program" as recited, for example, by independent claim 1 (and similarly recited by the other independent claims) is not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention at the time the application was filed. In particular, the Examiner alleges that the "generating step" is not described.

Appellants respectfully disagree. In particular, and as acknowledged by the Examiner, Appellants' specification clearly states that "DSP 12 decrypts the decryption program using the security code" (emphasis added – see page 7, lines 24-25). In view of this description, it should be intuitive to those skilled in the art that the "generating step" is performed by decrypting the decryption program. That is, using the "security code" to decrypt the decryption program inherently generates a [decrypted] "decryption

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program". The decrypted decryption program clearly differs in form from the encrypted decryption program, and thus, the decrypted form of the program is generated from the encrypted form of the program. Accordingly, Appellants submit that the "generating step" is in fact described by the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention at the time the application was filed, and respectfully request the Board to reverse this rejection.

B. Patentability of Claims 1-7 and 9-10 under 35 U.S.C. §112, Second Paragraph

Appellants submit that for at least the reasons discussed below, the subject claims satisfy the requirements under 35 U.S.C. §112, second paragraph.

On page 3 of the final Office Action dated October 31, 2008, the Examiner ostensibly alleges that the step of "using a security code associated with the handheld audio playback device to generate a decryption program" as recited, for example, by independent claim 1 (and similarly recited by the other independent claims) is indefinite.

Appellants respectfully disagree. As indicated above, Appellants' specification clearly states that "DSP 12 decrypts the decryption program using the security code" (emphasis added – see page 7, lines 24-25). That is, using the "security code" to decrypt the decryption program inherently generates a [decrypted] "decryption program". As such, Appellants submit that the current claim language is sufficiently clear and definite, and respectfully request the Board to reverse this rejection.

C. Patentability of Claims 1-7 and 9-10 under 35 U.S.C. §103(a)

Appellants submit that, for at least the reasons discussed below, the subject claims are patentably distinguishable over the cited combination of references under 35 U.S.C. §103(a).

Independent claim 1 recites:

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"identifying a selected audio data file in response to a user input;
identifying a decoder file associated with the selected audio data file, the decoder file comprising a decoding program to control a decoding function of a digital signal processor;
transferring the selected audio data file and the associated decoder file to the digital signal processor, wherein the selected audio data file and the associated decoder file are both stored in a single removable data storage device coupled to the handheld audio playback device;
using a security code associated with the handheld audio playback device to generate a decryption program;
decrypting the associated decoder file using the decryption program;
decrypting the selected audio data file using the decryption program" (emphasis added)

As indicated above, independent claim 1 defines a method for playing back an audio data file in which a security code associated with a handheld audio playback device is used to generate a decryption program. The decryption program is then used to decrypt a selected audio data file and a decoder file associated with the selected audio data file. In this manner, independent claim 1 defines an advantageous combination in which a security code associated with a handheld audio playback device is used to generate a decryption program that is then used to decrypt both a selected audio data file and a decoder file associated with the selected audio data file. Independent claims 4, 6 and 10 define subject matter similar to independent claim 1.

None of the cited references, whether taken individually or in combination, discloses or suggests, *inter alia*, each and every element of independent claims 1, 4, 6 and 10. On pages 5-6 of the final Office Action dated October 31, 2008, the Examiner ostensibly admits that neither Kaganas nor Cho discloses the feature of "using a security code associated with the handheld audio playback device to generate a decryption program" as recited, for example, by independent claim 1. In an attempt to remedy this admitted deficiency of Kaganas and Cho, the Examiner cites Truong and specifically alleges:

"Truong teaches that the security table, which includes various decoding algorithms, is used to create the encoded information (column 3, line 26 and lines 34-36). The decoding utilizes the unique identification specific

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to the recording medium to decode the data (column 4, lines 24-58). The unique encrypted signature is based on information on the recorded medium (column 4, lines 44-45) and the keys associated with decrypting the associated data and programs are also based on values found in a security table (column 3, lines 25-26 and lines 34-36). This reads on "using a security code associated with the handheld audio playback device to generate a decryption program". (italics original – underlining added)

As indicated above, the Examiner refers to a "security table, which includes various decoding algorithms". According to column 3, lines 25-26 of Truong, these "decoding algorithms" are "in encrypted form". As best understood, Appellants assume it is the Examiner's position that one of these "decoding algorithms" of Truong corresponds to the claimed "decryption program" in the claim language "using a security code associated with the handheld audio playback device to generate a decryption program" recited above. The Examiner also refers to column 4, lines 24-58 of Truong which describe steps 101 and 102 in FIG. 1.

In response, Appellants submit that nowhere does the proposed combination, including the teachings of Truong, teaches or suggests, *inter alia*, the feature of "using a security code associated with the handheld audio playback device to generate a decryption program" as recited, for example, by independent claim 1. In particular, while Truong discloses "a security table containing decoding algorithms in encrypted form" (see again column 3, lines 25-26), there is absolutely no teaching or suggestion that any of these "decoding algorithms" is generated (or decrypted) "using a security code associated with the handheld audio playback device" as claimed.

While the Examiner ostensibly alleges that column 4, lines 24-58 of Truong disclose the aforementioned claimed feature, Appellants respectfully disagree. As indicated above, column 4, lines 24-58 of Truong describes steps 101 and 102 in FIG. 1. Step 101 in FIG. 1 of Truong is a "check identity parameter" step in which an identity parameter of a recording medium is compared with a parameter prerecorded in a hardware security device to verify a match or predetermined relationship between the two (see column 4, lines 26-31). In this manner, step 101 is performed to correctly

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identify the particular recording medium, but “does not give the user access to the information stored on the medium” (see column 4, lines 33-37). As such, step 101 in FIG. 1 of Truong fails to teach or suggest, *inter alia*, that any of the “decoding algorithms” (one of which is presumed to allegedly correspond to the claimed “decryption program”) contained in its “security table” (see again column 3, lines 25-26) is generated (or decrypted) using a security code associated with a handheld audio playback device. Accordingly, step 101 in FIG. 1 of Truong fails to teach or suggest, *inter alia*, the claimed feature of “using a security code associated with the handheld audio playback device to generate a decryption program” as recited, for example, by independent claim 1.

Step 102 in FIG. 1 of Truong is a “check content” step in which the integrity of the contents of the recording medium are verified by comparing an encrypted signature stored on the recording medium with a signature calculated based on information taken from the recording medium (see column 4, lines 38-45). However, step 102 in FIG. 1 of Truong nowhere teaches or suggests, *inter alia*, that any of the “decoding algorithms” (one of which is presumed to allegedly correspond to the claimed “decryption program”) contained in its “security table” (see again column 3, lines 25-26) is generated (or decrypted) using a security code associated with a handheld audio playback device. Accordingly, step 102 in FIG. 1 of Truong fails to teach or suggest, *inter alia*, the claimed feature of “using a security code associated with the handheld audio playback device to generate a decryption program” as recited, for example, by independent claim 1.

Appellants further note that none of the steps in FIG. 1 (i.e., the sole drawing figure) of Truong discloses or suggests the aforementioned claimed feature. Therefore, in summary, while Truong generally discloses that “a security table containing decoding algorithms in encrypted form” is provided (see again column 3, lines 25-26), the reference fails to teach or suggest, *inter alia*, that any of these “decoding algorithms” is generated (or decrypted) “using a security code associated with the handheld audio playback device” as claimed.

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Accordingly, Appellants submit that the proposed combination of references, whether taken individually or in combination, fails to disclose or suggest each and every limitation of the present claims. For this reason alone, Appellants respectfully request the Board to reverse this rejection.

Appellants further submit that one of ordinary skill in the art would have absolutely no motivation to combine the cited references in the proposed manner. As such, Appellants submit that the instant rejection is the product of impermissible hindsight reconstruction, and should be reversed. This lack of motivation to combine and impermissible hindsight is evidenced by the Examiner's own statements. In particular, in an attempt to justify the proposed combination of references, the Examiner alleges:

"It would have been obvious for one of ordinary skill in the art to combine the teachings of Kaganas, Cho, and Truong for the purpose of copy protection" (emphasis added – see page 6 of the final Office Action dated October 31, 2008)

As indicated above, the Examiner's purported rationale for combining the three (3) cited references is "for the purpose of copy protection." However, Appellants note that the combination of Kaganas and Cho alone would satisfy this objective. In particular, Cho clearly discloses a digital data file encryption apparatus and method that provides substantial "copy protection" using multiple keys (see, for example, the Abstract and column 1, lines 6-14). Accordingly, Appellants submit that one of ordinary skill in the art would have absolutely no motivation to combine the teachings of Truong to the combined teachings of Kaganas and Cho for the purpose of "copy protection" since the combination of Kaganas and Cho alone would satisfy this objective. The Examiner has failed to provide any reasoning as to why one skilled in the art would additionally add the features of Truong to a system that already provides "copy protection" aside from the broad, generalized statement. As such, Appellants submit that the Examiner's proposed modification of Kaganas and Cho using the teachings of Truong is the result of impermissible hindsight reconstruction.

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Accordingly, for at least the foregoing reasons, Appellants submit that claims 1-7 and 9-10 are patentably distinguishable over the cited combination of references under 35 U.S.C. §103(a), and respectfully request that the Board reverse this rejection.

VIII. Claims Appendix

1. In a handheld audio playback device, a method for playing back an audio data file, the audio data file being encoded in accordance with a selected one of a plurality of encoding formats, the method comprising the steps of:

identifying a selected audio data file in response to a user input;

identifying a decoder file associated with the selected audio data file, the decoder file comprising a decoding program to control a decoding function of a digital signal processor;

transferring the selected audio data file and the associated decoder file to the digital signal processor, wherein the selected audio data file and the associated decoder file are both stored in a single removable data storage device coupled to the handheld audio playback device;

using a security code associated with the handheld audio playback device to generate a decryption program;

decrypting the associated decoder file using the decryption program;

decrypting the selected audio data file using the decryption program;

decoding the decrypted audio data file in accordance with the decrypted decoder file in the digital signal processor; and

providing the decoded audio data file to an output device.

2. The method according to claim 1, further comprising the step of:

reading a configuration file that associated each one of a plurality of audio data files with a particular one of a plurality of decoder files, and the identifying the decoder file step comprises identifying the decoder file using the configuration file.

3. The method according to claim 2, wherein the single removable data storage device is a solid state data storage device.

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4. A handheld audio playback apparatus for playing back an audio data file encoded in accordance with a selected one of a plurality of encoding formats, the apparatus comprising:

user input means for receiving user commands;

data input means for receiving digital data;

a digital signal processor;

a micro-controller, coupled to the user input means, the data input means, and the digital signal processor, for identifying a user selected audio data file and a decoder file associated with the user selected audio data file, the decoder file comprising a decoding program for controlling a decoding function of the digital signal processor, the micro-controller transferring the user selected audio data file and the associated decoder file from a single user removable data storage device to the digital signal processor in response to a user selection, the micro-controller further transferring a security code associated with the handheld audio playback apparatus to the digital signal processor, and wherein the digital signal processor uses the security code to generate a decryption program, decrypts the associated decoder file using the decryption program, decrypts the user selected audio data file using the decryption program, and decodes the decrypted audio data file in accordance with the decrypted associated decoder file.

5. The handheld audio playback apparatus according to claim 4, wherein the single user removable data storage device comprises a solid state data storage device coupled to the micro-controller.

6. A handheld audio playback system, comprising:

user input means for receiving user commands;

data input means for receiving digital data;

a removable data storage device coupled to the data input means;

a digital signal processor; and

a micro-controller, coupled to the user input means, the data input means, and the digital signal processor, for identifying a selected audio data file and an associated

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decoder file stored on the removable data storage device in response to a user input, the micro-controller transferring the selected audio data file and the associated decoder file to the digital signal processor, the micro-controller further transferring a security code associated with the handheld audio playback system to the digital signal processor, wherein the digital signal processor uses the security code to generate a decryption program, decrypts the associated decoder file using the decryption program, decrypts the selected audio data file using the decryption program, and decodes the decrypted audio data file in accordance with the decrypted associated decoder file.

7. The handheld audio playback system according to claim 6, wherein the removable data storage device comprises a solid state data storage device.

9. The handheld audio playback system according to claim 6, wherein the removable data storage device includes a configuration file for identifying a plurality of stored audio data files and the decoder file associated with each one of the plurality of stored audio data files.

10. In a handheld audio playback device, a method for playing back an audio data file, the audio data file being encoded in accordance with a selected one of a plurality of encoding formats, the method comprising the steps of:

identifying a selected audio data file in response to a user input;

identifying a decoder file associated with the selected audio data file, the decoder file comprising a decoding program to control a decoding function of a digital signal processor;

transferring the selected audio data file and the associated decoder file to the digital signal processor, wherein the selected audio data file and the associated decoder file are both stored in a single removable data storage device coupled to the handheld audio playback device;

using a security code associated with the handheld audio playback device to generate a decryption program;

decrypting the associated decoder file using the decryption program;

decrypting the selected audio data file using the decryption program;

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decoding the selected decrypted audio data file in accordance with the decrypted
decoder file in the digital signal processor; and
providing the decoded audio data file to an output device.

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IX. Evidence Appendix

None.

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X. Related Proceedings Appendix

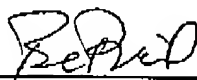
None.

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Respectfully submitted,
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